Gulf of Mexico Harmful Algal Bloom Bulletin

17 September 2004

National Ocean Service/NCCOS and CSC

NESDIS/CoastWatch and NDBC

Last bulletin: September 13, 2004

Analysis

HAB Forecast:

Florida Gulf Coast. HABs not found. Very low potential of red tide through Sunday, Sep 19. The strong winds have led to non-harmful blooms (of diatoms)and may produce areas of discolored water.

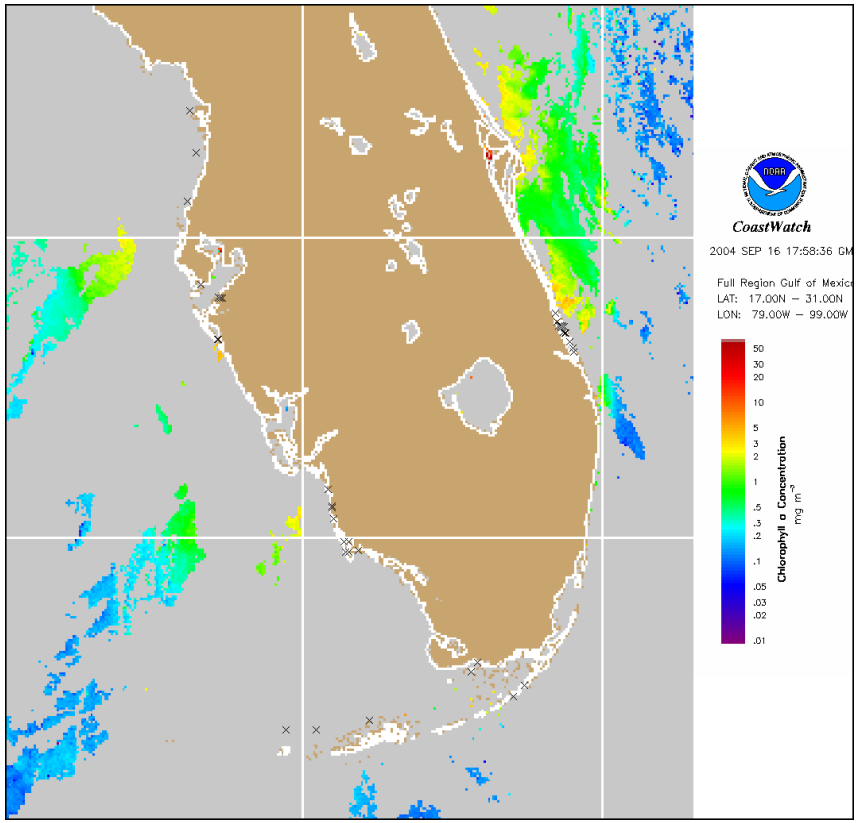
Analysis:

Hurricane Ivan's movement through the Gulf of Mexico has obscurred satellite imagery for the past 5 days, making it impossible to detect the development or intensification of new or existing blooms.

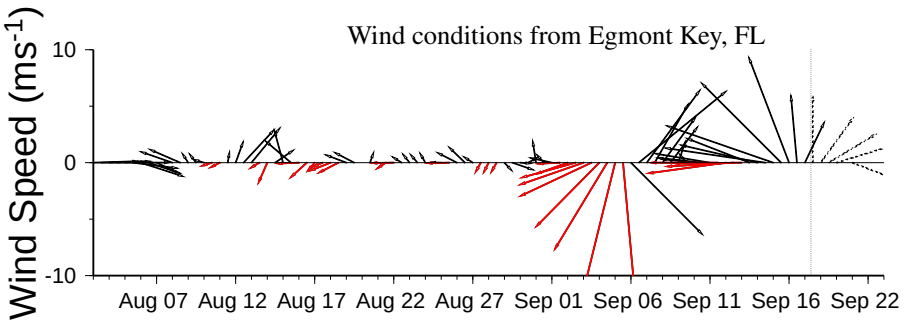
Sampling performed on September 15 by the Fish and Wildlife Research Institute confirmed the presence of numerous diatoms from Barefoot Beach (81d84'W, 26d33'N) south to Marco Island. No K. brevis found in this region or near Sarasota.

Southeasterly to southerly hurricane force winds have likely transported offshore water and blooms to the coast over the past few days. Chlorophyll concentrations are likely to be high along much of the Eastern Gulf coastline due to benthic chlorophyll and sediment resuspension, river runoff, and diatom presence. Reports of discolored water are possible. As winds become more easterly over the weekend, upwelling conditions may become favorable, increasing the possibility of K. brevis appearance.

~Fisher, Bronder

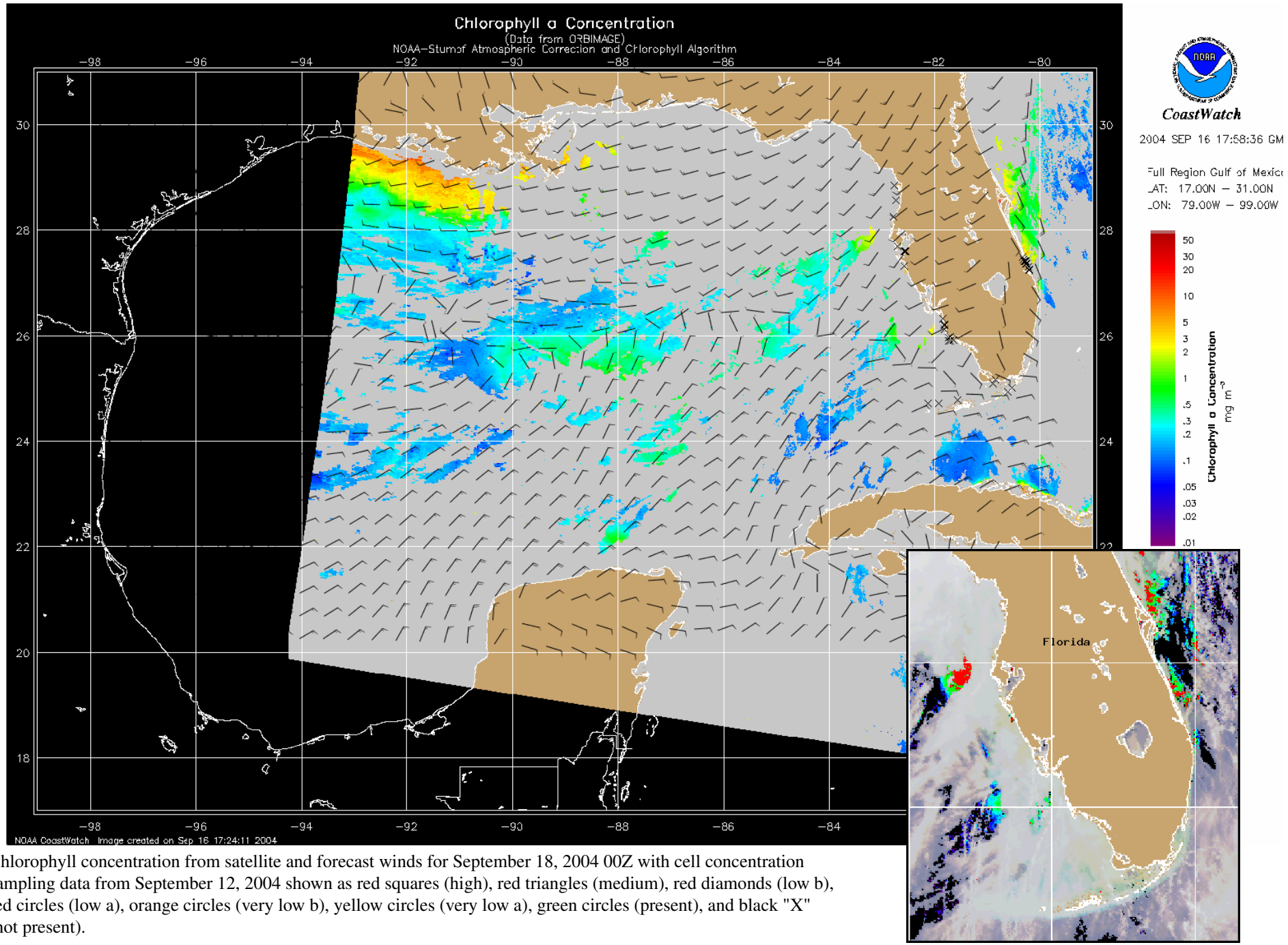


Chlorophyll concentration from satellite with possible HAB areas shown by red polygon(s). Cell concentration sampling data from September 12, 2004 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).



Wind speed and direction are averaged over 12 hours from measurements made on buoys. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

Southwesterly winds on the western Florida coast will shift northerly to easterly over the next 2-3 days. Northwest winds in the Apalachicola region will shift to northeasterly by Sunday.



Chlorophyll concentration from satellite and forecast winds for September 18, 2004 00Z with cell concentration sampling data from September 12, 2004 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).

Blooms shown in red (see p. 1 analysis and image for interpretation)

Wind conditions from Tyndall AFB Tower C